

REMARKS

This Amendment is in response to the Office Action dated June 23, 2005 in which claims 1, 2 and 11-12 were rejected, claims 3-10 were indicated as being allowable if rewritten in independent form, and claims 13-28 were allowed. Applicants respectfully request reconsideration and allowance of claims 1, 2 and 11-12 in view of the above-amendments and the following remarks.

I. CLAIM AMENDMENTS

Independent claim 1 is amended to more positively recite the step of "defining a continuous set of possible combinations in which each combination in the set satisfies a predetermined criteria."

This Amendment is believed not to raise new issues since it is re-casting limitations that are already present in the claim. Entry of the proposed amendments to claim 1 is respectfully requested.

II. CLAIM REJECTIONS

Claims 1, 2 and 11-12 were rejected under §102(e) as being anticipated by Lembach et al., U.S. Patent No. 4,698,760.

As discussed in the previous Amendment, Lembach et al. disclose a method of optimizing the signal timing delays and power consumption in LSI circuits. Based on these calculations, circuit blocks are set to different power levels. (See e.g., column 8, lines 46-57).

A. Lembach et al. Do Not Define a Continuous Set of Possible Combinations of Delay Values or Assign Delay Values From That Set

Claim 1 requires the step of assigning a corresponding delay value to each of a plurality of pins of the block. Each pin corresponds to a respective signal path through the block. The delay values together form a delay value combination that is selected from the continuous set of possible combinations.

Lembach et al. do not define a continuous set of possible combinations of delay values. Rather, Lembach et al. set circuit blocks to various power levels. Lembach et al. also do not assign each of a plurality of the pins a corresponding delay value, where the delay values together form a combination that is selected from the continuous set defined previously.

The Examiner has provided only a general citation to column 6, line 37, to column 8, line 15 and to columns 11-14. However, the Examiner has not pointed to any location at which Lembach et al. discloses the step of defining a continuous set of possible combinations or the assignment of corresponding delay value combinations from that set, as recited in claim 1.

B. Generating a Circuit Configuration

The Examiner has suggested that Lembach discloses certain logic design changes could be made to meet timing requirements. The fact that certain design changes could be made to meet timing requirements does not satisfy the limitations recited in step (b) of claim 1.

Step (b) requires "generating a circuit configuration for the block with a plurality of logic cells that are interconnected in the netlist such that the respective signal paths through the block have delays based on the corresponding delay values assigned is step (a)."

No where does Lembach et al. disclose the step of generating a circuit configuration for the block based on corresponding delay values assigned to the pins of the block, wherein the delay values together form a combination that is selected from a predefined continuous set of possible combinations.

As mentioned in the previous response, the method disclosed in Lembach et al. believes the circuit configuration is fixed. Only the power levels are changed. If the algorithm disclosed by Lembach et al. fails to remove timing violations,

Lembach et al. simply suggest, "either a timing requirement modification must be made, or a logic design change must be made or a technology change must be made to another form of circuit."

This statement provides no teaching of a method in which a continuous set of possible combinations are defined, corresponding delay values are assigned to the block and a circuit configuration is generated based on the assigned delay values.

Lembach et al. therefore fail to disclose the method steps recited in claim 1 both individually and as whole.

Applicants therefore respectfully request that the rejection of claims 1, 2 and 11-12 under §102(e) be withdrawn since the Lembach et al. patent does not anticipate these claims.

The Director is authorized to charge any fee deficiency required by this paper or credit any overpayment to Deposit Account No. 23-1123.

Respectfully submitted,

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